Establishing a health monitoring system for cattle in Austria

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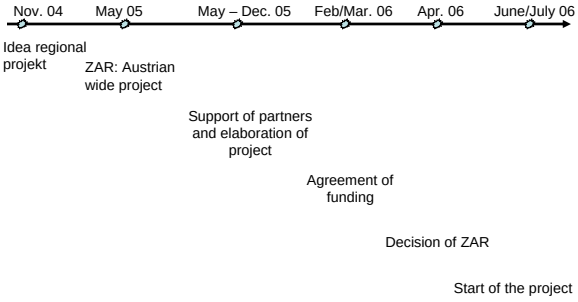
Project history
From the idea to implementation



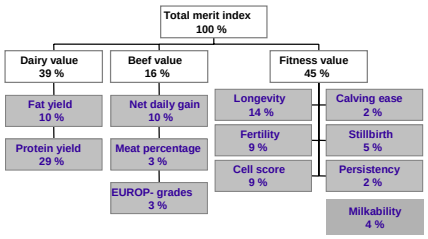
Overview

- Background
- Aims
- Data recording
- Genetic evaluation
- Health reports
- Project organisation
- Benefits
- Conclusions

Background

- Functional traits are becoming increasingly important due to pressure on production prices.
- Increasing herd sizes demand for efficient cattle without problems and good health.
- Growing demands for consumer acceptance and confidence.

Breeding goal
(Austrian Simmental)



No diagnostic data have been included within the fitness traits so far.

Documentation of diagnostic data
Starting point

- There is the obligation by law (law of drug control) that diagnoses and treatments have to be documented in Austria. These documents have to be kept for 5 years by veterinarians and farmers.
- The diagnoses have not been standardised.
- Those data have neither been collected nor stored in a database.

Presently no diagnostic data are available for use in breeding and herd management in Austria.

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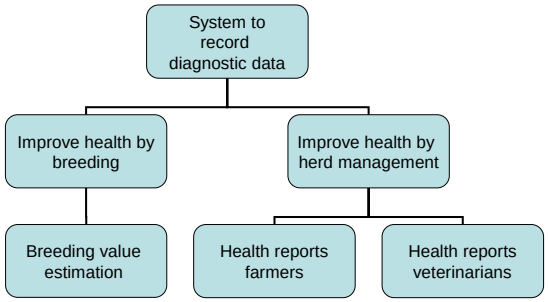
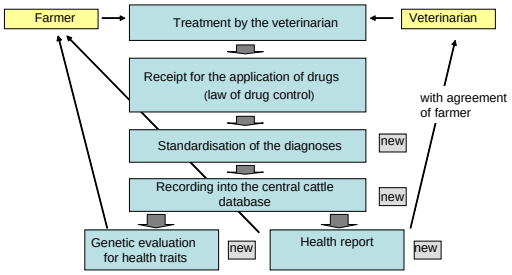
Project aims



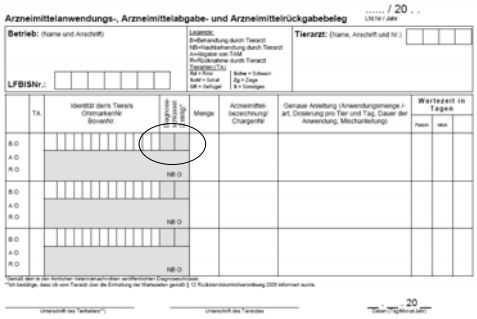
Target group
Who can participate?

- Austrian wide project
- Voluntary participation
- Open to all cattle under performance recording (also juvenile)
- Membership in Animal Health Organisation is advantageous, but not precondition
- Vision for the future: open for all cattle holders

Recording of data and backflow of information



New receipt for the application of drugs


Arzneimittelanwendungs-, Arzneimittelabgabe- und Arzneimittelrückgabebeleg

Standardisation of diagnoses
Austrian wide key

Data recording and data storage

What is recorded?

- Identity of the animal
- Identity of the farm
- Number of the veterinarian
- Diagnoses and date of diagnoses from first treatments only

Where is it stored?

In the central cattle database

Data protection

Declaration of consent for

- recording of data
- transferring data to the veterinarians.

With the declaration of consent and the law of data protection data security is warranted.

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Breeding for animal health
Steps in breeding

Breeding goal

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Performance recording

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Genetic evaluation

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Breeding programme

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Genetic response

Breeding for animal health
Planned measures

Aim: Breeding values for health traits for bulls

- Data quality and data validation.
- Study of trait definition.
- Analyses of environmental effects and estimation of genetic parameters for main breeds.
- Estimation of economic weights.
- Elaboration of routine genetic evaluation for health traits.
- Analyses concerning requirements of breeding programmes.

Health reports for herd management

- Provision of health reports with already existing data from performance recording as well as diagnostic data.
  - *Daily report*: e.g. action lists
  - *Annual report*: gives overview about health status of herd
- Future plan to include data from slaughtering houses, milk laboratories as well as hoof trimming.

Link to Animal Health Organisations

- Presently no information based on individual diagnostic data nor data from performance recording are available for consultancy of farmers on animal health and herd management.
- Comprehensive health reports with information from performance recording and diagnoses will be available.

Health reports are valuable for Animal Health Organisations to consult farmers.

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Project organisation

Project partners:
- Animal Health Organisations
- Chamber of Agriculture
- Chamber of Veterinarians
- Ministry of Agriculture, Forestry, Environment and Water management
- Ministry of Health and Women
- University of Natural Resources and Applied Life Sciences
- University of Veterinary Sciences
- ZuchtData EDV-Dienstleistungen GmbH

Project executing organisation:
- Federation of Austrian Cattle Breeders with member organisations from breeding, performance recording and artificial insemination.

Project management:
- Committee with representatives of different groups.

Benefits

- **Farmer:** Improved breeding values for bulls and health reports for the optimisation of herd management. Higher economic efficiency.
- **Veterinarians:** Health reports for consultancy of farmers in disease avoidance. Valuable tool for auditing.
- **Cattle breeding:** Contribution to further positioning of the Austrian cattle breeding with high emphasis on functional traits.
- **Consumer:** On the long term an increase in consumer safety is expected.

Key factors for success
Collaboration of farmers and veterinarians essential

High participation:
- **Genetic evaluation**: reliable breeding values will only be enabled by high participation of farmers and veterinarians – base for genetic response.
- **Health reports**: For the explanatory power of key figures from health reports a wide participation is important.

Good data quality:
- Awareness and monitoring of data quality is important.

Conclusions

- Consideration of health traits has the chance of success (e.g. Skandinavian countries).
- Difficult project – needs the full support of farmers, veterinarians and their organisations and representatives.
- Key factor for success is a good data quality: cooperation with performance recording organisations is very valuable.
- Success only possible in cooperation with partners from cattle breeding, performance recording, veterinarians, science and the support by the Ministries.

Acknowledgement

The Federation of Austrian Cattle Breeders thanks

- the Ministry of Agriculture, Forestry, Environment and Water management and the Ministry of Health and Women as well as the Federal States for their financial support.
- the partner organisations for their good cooperation and their valuable advise.
- The colleagues from other countries for their advise and sharing of experiences.

Success in the future –
cattle with good yield and good health!